

REMARKS

Claims 1-9 are currently pending in this application.

The Present Invention

The present invention is directed to a clear coated metal sheet which has metallic luster with an interference color. The clear coat is formed to preserve the integrity of a metallic surface, and the metallic luster originates in the surface of a base metal sheet. Such external appearance is not produced by any of the cited references. The clear paint film of the present invention does not reduce the brightness of the base metal sheet. Claim 1 has been amended to that effect for clarification. Support for this amendment is found in the specification beginning at page 7, line 4. No new matter has been added.

35 U.S.C. §102(b) Rejections

Claims 1-3 and 6-8 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,025,041 to Pfenninger et al. ("Pfenninger"). Applicants respectfully traverse this rejection.

As amended, Claim 1 reflects the fact that the brightness of the underlying base metal sheet is not reduced by the application of the clear paint film. This feature is not taught in the Pfenninger reference, nor can it be achieved by the composition disclosed therein. Contrary to the Examiner's assertion in the Office Action that "the pearlescent coatings taught in Pfenninger are understood to be clear because they do not contain any pigment", the compositions of Pfenninger do contain pigment. In fact, the compositions in Pfenninger contain a manganese salt of an azo pigment (col. 1, line 65). An azo pigment is a representative red pigment, e.g., Pigment No. Red 12, 18, 112, 144, 150, 170, 184, 188. Inclusion of the azo pigment in the "pearlescent coating" means that a metallic luster of a base metal sheet is shielded by the "pearlescent coating". Pfenninger states "the pearlescent coating compositions of the invention provide paint films with an intense color

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and high pearlescence" (col. 5, lines 34-46) and "aluminum panels treated with a grey acrylic polymer" (col. 6, line 59) (emphasis added).

Pfenninger clearly distinguishes the "pearlescent coating" from "a clear coat", as noted in descriptions at col. 3, line 68 to col. 4, line 2; col. 4, lines 12-24; col. 4, lines 46-49; col. 4, lines 59-62, and col. 5, lines 20-33, for example. In short, the "pearlescent coating" taught by Pfenninger is a "pearlescent color coat" but not a "pearlescent clear coat". Thus, the compositions of Pfenninger cannot be said to maintain the brightness of the base metal sheet. Pfenninger does not teach every element of Claim 1, and therefore does not anticipate Claims 1-3 and 6-8. Applicants respectfully request withdrawal of this basis of rejection.

Claims 1-3, 6 and 7 stand rejected under 35 U.S.C. §102(b) as being anticipated by Panush et al. ("Panush"). Applicants respectfully traverse this rejection. At the outset Applicants point out that Panush is conceded by the Examiner not to teach an under clear coat having a flaky pigment (page 6 of the Office Action) as recited in Claim 6. Therefore, this reference cannot anticipate Claim 6.

Claim 1 recites "A clear coated metal sheet, which comprises a base metal sheet having a metallic surface, a clear-paint film....". Applicants respectfully submit that Panush does not teach a clear coated metal sheet having a coating that maintains the brightness of the base metal sheet. For example, Panush states "the invention is especially pertinent to the application of mica pigmented top coatings to base coatings having compatible solvents and pigments" (col. 3, lines 7-9). At column 5, lines 14-19, the patent discloses that when used on an automotive steel body, the composition is preferably applied over a basecoat having a pigment such as titanium dioxide mixed with carbon black and indathrone blue. Inclusion of pigments means that the basecoat is a color coat which shields a metallic luster of a base metal sheet. Thus, the Examiner's statement that "said layer is understood to read on the claimed under clear coat" does not have any basis in the Panush teachings.

Panush does not teach every element of Claim 1, and therefore does not anticipate Claims 1-3, 6 and 7. Applicants respectfully request withdrawal of this basis of rejection.

Claim Rejections under 35 U.S.C. §103(a)

Claim 9 stands rejected under 35 U.S.C. §102(b) as being anticipated by Pfenninger as applied to claims 1-3 and 6-8 above and further in view of U.S. Patent No. 6,534,185 to Baumgart et al. ("Baumgart"). Applicants assume that this was intended as a §103 rejection, and traverse the rejection as such.

Baumgart is apparently cited for a teaching of the thickness of a clear coat for an automobile finish (col. 1, lines 5+) for use in two-coat systems (col. 8, lines 7+). However, Applicants note that the basecoat taught by Baumgart is also a color coat, as described at col.8, lines 53-55: "in a first process step, a pigmented basecoat material is applied conventionally to these substrates". Neither Pfenninger nor Baumgart disclose a clear paint film that does not reduce the brightness of the underlying metal sheet. Since neither reference discloses the missing teaching, they cannot be combined to arrive at this result. Applicants respectfully submit that Claim 1, and the claims depending therefrom, are not obvious in view of these references and respectfully request withdrawal of this basis of rejection.

Claims 4 and 5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Panush as applied to claims 1-3, 6 and 7 above, and further in view of JP 62-057676 to Kansai ("Kansai").

Kansai is cited for a teaching of a topcoat comprising a matting agent. As conceded by the Examiner in the Office Action, the basecoat of Kansai contains a pigment. Thus, Kansai cannot be combined with Panush to provide the missing teaching, namely, a clear paint film that does not reduce the brightness of the underlying metal substrate. Applicants submit that this combination of references does not render Claim 1, nor the claims depending therefrom, obvious, and request withdrawal of this basis of rejection.

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Claims 1-3 and 6-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Panush in view of Pfenninger. Applicants respectfully traverse this rejection.

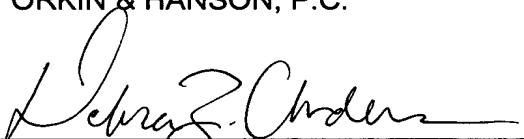
As explained above, both Pfenninger and Panush describe compositions that either contain a traditional pigment (such as the azo pigment of Pfenninger) or are to be used on top of compositions containing pigment (Panush). These traditional types of pigments are different from the metal oxide coatings on the inorganic flakes which impart color to the composition, because the traditional pigments do not allow the luster of the metal sheet to come through. Neither Panush nor Pfenninger, alone or in combination, teaches or suggests how to accomplish the result achieved in the present invention, wherein the brightness of the metal sheet is not reduced after a coating of the clear paint film of the present invention is applied.

Applicants respectfully submit that the present invention is not obvious in view of nor anticipated by any of the references cited. Based on the foregoing amendments and remarks, reconsideration of the rejections and allowance of pending claims 1-9 are respectfully requested.

Respectfully submitted,

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